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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 217

[Docket No. 130820738-4114-02]

RIN 0648-BD62

Taking and Importing Marine Mammals; Taking Marine Mammals Incidental to U.S. Air Force Launches, Aircraft and Helicopter Operations, and Harbor Activities Related to Launch Vehicles from Vandenberg Air Force Base (VAFB), California

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule.

SUMMARY: NMFS, upon application from the U.S. Air Force (USAF), is issuing regulations pursuant to the Marine Mammal Protection Act (MMPA) to govern the unintentional taking of marine mammals incidental to launches, aircraft and helicopter operations from VAFB launch complexes and Delta Mariner operations, cargo unloading activities, and harbor maintenance dredging in support of the Delta IV/Evolved Expendable Launch Vehicle (EELV) launch activity on south VAFB for the period March 2014 to March 2019. These regulations, which allow for the issuance of Letters of Authorization (LOAs) for the incidental take of marine mammals during the described activities and specified timeframes, prescribe the permissible methods of taking and other means of effecting the least practicable adverse impact on marine mammal species or stocks and their habitat, as well as requirements pertaining to the monitoring and reporting of such taking.

DATES: Effective from March 26, 2014 through March 26, 2019.

ADDRESSES: A copy of the application and our Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) may be obtained by visiting the Internet at:

<http://www.nmfs.noaa.gov/pr/permits/incidental.htm#applications>. Documents cited in this final rule may also be viewed, by appointment, during regular business hours at 1315 East West Highway, Silver Spring, MD 20910.

FOR FURTHER INFORMATION CONTACT: Candace Nachman, Office of Protected Resources, NMFS, (301) 427-8401.

SUPPLEMENTARY INFORMATION:

Background

Sections 101(a)(5)(A) and (D) of the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce (Secretary) to allow, upon request, the incidental, but not intentional taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, notice of a proposed authorization is provided to the public for review.

Authorization for incidental takings may be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact on the availability of the species or stock(s) for certain subsistence uses, and that the permissible methods of taking and requirements pertaining to the mitigation, monitoring and reporting of such taking are set forth. NMFS has defined “negligible impact” in 50 CFR 216.103 as: “an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of

recruitment or survival.”

The National Defense Authorization Act of 2004 (NDAA) (Public Law 108-136) removed the “small numbers” and “specified geographical region” limitations and amended the definition of “harassment” as it applies to a “military readiness activity” to read as follows (Section 3(18)(B) of the MMPA): “(i) any act that injures or has the significant potential to injure a marine mammal or marine mammal stock in the wild [Level A Harassment]; or (ii) any act that disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns, including, but not limited to, migration, surfacing, nursing, breeding, feeding, or sheltering, to a point where such behavioral patterns are abandoned or significantly altered [Level B Harassment].” Because the USAF’s activities constitute military readiness activities, they are not subject to the small numbers or specified geographic region limitations.

Based on a previous request from the USAF, NMFS issued regulations and LOAs to the USAF to allow it to take species of pinnipeds at the VAFB. Those regulations and LOAs expired on February 6, 2014.

Summary of Request

On June 24, 2013, NMFS received an application from the USAF requesting regulations and an LOA for the take of five species of pinnipeds incidental to USAF launch, aircraft, and helicopter operations from VAFB launch complexes and Delta Mariner operations, cargo unloading activities, and harbor maintenance dredging. The Delta Mariner operations, cargo unloading, and harbor maintenance dredging are conducted in support of the Delta IV/EELV launch activity from Space Launch Complex 6 on south VAFB. NMFS has issued regulations to govern these activities, to be effective from March 2014, through March 2019. These training

activities are classified as military readiness activities. The USAF states that these activities may result in take of marine mammals from noise or visual disturbance from rocket and missile launches, as well as from the use of heavy equipment during the Delta Mariner off-loading operations, cargo movement activities, increased presence of personnel, and harbor maintenance dredging. The USAF requested authorization to take annually five pinniped species by Level B Harassment: Pacific harbor seals; California sea lions; northern elephant seals; northern fur seals; and Steller sea lions. In this final rule, NMFS has authorized the take by Level B harassment of all five species listed here.

Activities relating to the Delta Mariner operations have been authorized previously by NMFS under annual Incidental Harassment Authorizations (IHAs). To date, we have issued 10 IHAs to United Launch Alliance (working on behalf of the USAF) to take marine mammals incidental to conducting operations in support of Delta IV/EELV launch activity from Space Launch Complex (SLC) 6. The most recent IHA was effective from September 26, 2012, through September 25, 2013. Through this final rulemaking, NMFS and the USAF are incorporating the Delta Mariner operations into the rulemaking for the launch, aircraft, and helicopter operations at VAFB.

Description of the Specified Activity

VAFB Launch Activities and Aircraft and Helicopter Operations

VAFB (see Figure 1 in the USAF application) is headquarters to the 30th Space Wing (SW), the Air Force Space Command unit that operates VAFB and the Western Range. VAFB operates as a missile test base and aerospace center, supporting west coast space launch activities for the USAF, Department of Defense, National Aeronautics and Space Administration, and commercial contractors. VAFB is the main west coast launch facility for placing commercial,

government, and military satellites into polar orbit on expendable (unmanned) launch vehicles, and for testing and evaluating intercontinental ballistic missiles (ICBM) and sub-orbital target and interceptor missiles. In addition to space vehicle and missile launch activities at VAFB, there are helicopter and aircraft operations for purposes such as search-and-rescue, delivery of space vehicle components, launch mission support, security reconnaissance, and training flights. The USAF anticipates that the space and missile launch frequency will not exceed a combined total of 50 launches (35 rockets and 15 missiles) per year from VAFB. Table 1 in this document outlines the numbers of rocket and missile launches that occurred in 2011, 2012, and 2013. Although subject to change, Table 2 presents preliminary estimates of the numbers of rocket and missile launches from VAFB during calendar years 2014 through 2019. Estimates for the earlier years are likely more accurate than those for the last two to three years. However, as noted earlier, the launch frequency is not anticipated to exceed 50 launches in a given year. Any launches over this amount would require additional coordination between NMFS and the USAF before they occur.

Table 1. Numbers of rocket and missile launches in calendar years 2011, 2012, and 2013, from VAFB.

Year	Rocket Launches	Missile Launches
2011	7	2
2012	2	2
2013	4 (as of Sept. 24, 2013, 3 rockets launched with 1 additional planned before Dec. 31)	5 (as of Sept. 24, 2013, 3 missiles launched with 2 additional planned before Dec. 31)

Table 2. Preliminary numbers of projected rocket and missile launches in calendar years 2014 through 2019 from VAFB. The projections for calendar years 2018 and 2019 are highly preliminary at this time.

Year	Rocket Launches	Missile Launches
2014	6	6
2015	9	5
2016	9	6
2017	4	5
2018	9	6
2019	12	7

There are currently six active facilities at VAFB used to launch satellites into polar orbit. These facilities support launch programs for the Atlas V, Delta II, Delta IV, Falcon 9, Minotaur, and Taurus rockets. Various booster and fuel packages can be configured to accommodate payloads. Details on the vehicle types and the sound exposure levels (SELs) produced by each missile or rocket, as well as the helicopter and aircraft operations, were described in the proposed rule (78 FR 73794, December 9, 2013). That information has not changed and therefore is not repeated here.

Timeframe of USAF Launch and Aircraft Operations

Launch and aircraft operations could occur at any time of the day or night during the period to be covered under this final rule and associated LOA (March 2014-March 2019). The USAF anticipates that no more than 15 missile and 35 rocket launches would occur in any year. This number is far higher than launch activity in previous years, but one new facility (SLC 4) is being reactivated with intent to increase “commercial launch” activity, and Test Pad-01 is being renovated. The USAF notes that activity levels over the 5-year period between March 2014 and March 2019 will not exceed 75 missile and 175 rocket launches without additional coordination with NMFS. All launch operations would occur at VAFB, potentially resulting in launch noise and visual impacts there. Potential sonic boom impacts from space launch vehicles (SLVs) could occur over the Northern Channel Islands (NCI). Missiles are launched in a westerly trajectory and do not impact the NCI. Aircraft operations would occur only at VAFB and are anticipated to only impact hauled out pinnipeds when flying at low altitudes (i.e., typically below 305 m [1,000 ft]).

Harbor Activities Related to the Delta IV Evolved Expendable Launch Vehicle

The Delta IV/EELV is comprised of a common booster core, an upper stage, and a

payload fairing. The size of the common booster core requires it to be transported to the Base's launch site by a specially-designed vessel, the Delta Mariner. United Launch Alliance operates the Delta Mariner on behalf of the USAF. The Delta Mariner docks at the harbor on south VAFB. To allow safe operation of the Delta Mariner, United Launch Alliance requires that the harbor undergo maintenance on a periodic basis. The proposed rule contained a full description of the Delta Mariner operations, harbor maintenance dredging, and cargo movement activities (78 FR 73794, December 9, 2013). Those activities have not changed and therefore are not described again here.

Timeframe of Delta Mariner Activities

Cargo movement operations would occur for approximately 43 days (concurrent with the harbor maintenance activities). A fully-loaded vessel can be offloaded in 10 hours; however, the Delta Mariner may need to leave the dock and return at another time due to tide and wind extremes that may halt the removal of cargo. Dredging-related activities normally last between 3 and 5 weeks, including set-up and tear-down activities in the water and on shore. Dredging may proceed 24 hours per day to complete the job as quickly as possible and minimize the disruptive effect on the local animals; however, dredging at VAFB has historically been conducted in the daylight. Sedimentation surveys completed since the initial dredging indicate that maintenance dredging could be required annually, or even twice per year, depending on the hardware delivery schedule. Up to 5,000 cubic yards of sediment are allowed to be removed from the harbor per year by the United States Army Corps of Engineers permit. A survey occurs several months prior to each Delta Mariner visit to assess whether the harbor can be safely navigated. The area to be dredged is shown in Figure 1.2-1 of Appendix A in the application.

We expect that acoustic stimuli, resulting from the Delta Mariner activities, have the

potential to incidentally harass marine mammals. We also expect these disturbances to be temporary and result in a temporary modification in behavior and/or low-level physiological effects (Level B harassment only) of certain species of marine mammals.

We do not expect that the movement of the Delta Mariner during the conduct of the proposed activities has the potential to harass marine mammals because of the relatively slow operation speed of the vessel (1.5 to 2 kts; 1.72 mph) during its approach to the area at high tide and the vessel's slow operational speed (0.75 kts; 0.86 mph) during its approach to the wharf.

Description of the Geographic Region of the Activities

VAFB

VAFB is composed of approximately 99,000 acres of land, and approximately 64.4 km (40 mi) of coastline on the coast of central California, within Santa Barbara County (see Figure 1 in the USAF application). Space vehicles are launched into polar orbits on azimuths from 147-201 degrees, with sub-orbital flights to 281 degrees. Missile launches are directed toward Kwajalein Atoll in the Pacific. This over-water sector, from 147-281 degrees, comprises the Western Range. Part of the Western Range encompasses the NCI (see Figure 1 in the USAF application).

NCI

The NCI are located approximately 50 km (31 mi) south of the southern point on VAFB. Three islands, San Miguel, Santa Cruz, and Santa Rosa, make up the main NCI, with San Miguel Island being the primary site for pinniped rookeries. The NCI are part of the Channel Islands National Park and the Channel Islands National Marine Sanctuary. The closest part of the NCI (Harris Point on San Miguel Island) is located more than 55 km (34 mi) south-southeast of the nearest launch facility.

VAFB Harbor

The harbor maintenance and Delta Mariner activities will take place in or near the VAFB harbor located on the central coast of California at 34° 33' N., 120° 36' W. in the northeast Pacific Ocean. Activities related to these operations and described in Appendix A of the application will take place at VAFB harbor, located on South Base, approximately 2.3 km (1.4 mi) south of Point Arguello, CA, and approximately 1 mi (1.61 km) south of the nearest marine mammal rookery.

Description of Marine Mammals in the Area of the Specified Activity

Sections 3 and 4 of the USAF application and Sections 3 and 4 of Appendix A of the application contain detailed information on the abundance, status, and distribution of the species on VAFB and the NCI from surveys that they have conducted over the last decade and from NMFS Stock Assessment Reports (SARs). This information was summarized in the proposed rule (78 FR 73794, December 9, 2013) and may be viewed in detail in the USAF's LOA application (see ADDRESSES). Additional information is available in the NMFS SARs, which are available at: <http://www.nmfs.noaa.gov/pr/sars/pdf/po2012.pdf>.

The species most likely to occur at VAFB and the VAFB harbor are Pacific harbor seals, California sea lions, and northern elephant seals. Steller sea lions have also been seen in recent years at VAFB. However, Steller sea lions are not anticipated to be encountered on the NCI. Northern fur seals may be encountered on the NCI but are not found at VAFB haul-outs. Table 3 in this document outlines current population estimates of the five pinniped species described here on the NCI.

Table 3. NCI Pinniped Population Estimates

Species	San Miguel Island	Santa Rosa Island	Santa Cruz Island	Anacapa Island
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Pacific harbor seal	900	1,000	1,000	100
California sea lion	32,000 pups born in 2012 ¹	500 ²	1,200 ²	1,000 ²
Northern elephant seal	±10,000 pups yearly	±2,000 pups yearly	Occasional transient	Rare transient
Steller sea lion	Rare transient	None	None	None
Northern fur seal	9,968	None	None	None
<p><i>Sources:</i> Carretta <i>et al.</i> 2011 and 2012; Allen and Angliss 2011 and 2012</p> <ol style="list-style-type: none"> 1. No estimate is available for the total sea lion population on each main rookery island. Instead, pup counts are made at various breeding areas, and from this count, an estimate is made of the stock size, which includes pups, subadults and adults. 2. Regular surveys are not conducted of these islands, and pupping is very sporadic and minimal there. These are estimates of the total number of sea lions at these islands. 				

Other Marine Mammals in the Proposed Action Area

There are several cetaceans that have the potential to transit in the vicinity of VAFB, including the short-beaked common dolphin (Delphinus delphis), the Pacific white-sided dolphin (Lagenorhynchus obliquidens), and the gray whale (Eschrichtius robustus). We do not consider these species further in this final rule because they are typically found farther offshore of VAFB and the VAFB harbor and are unlikely or rare in the action area. Guadalupe fur seals (Arctocephalus townsendi) are reported occasionally at San Miguel Island; and, in 1998, a pup was successfully weaned there (Melin and DeLong, 1999). However, their occurrence is rare.

California (southern) sea otters (Enhydra lutris nereis) are listed as threatened under the Endangered Species Act and categorized as depleted under the MMPA. The U.S. Fish and Wildlife Service manages this species, and we do not consider this species in greater detail within this final rule. This final rule only address requested take authorizations for pinnipeds. The USAF launch, aircraft, and helicopter operations have the potential to take Pacific harbor seals, California sea lions, northern elephant seals, Steller sea lions, and northern fur seals by Level B harassment. The harbor activities related to the launch vehicles at VAFB have the potential to take four of the same species (all but northern fur seals, which are not found in the vicinity of the VAFB harbor) by Level B harassment.

Potential Effects of Specified Activities on Marine Mammals

The activities proposed have the potential to cause harassment of marine mammals through both acoustic and visual stimuli. The USAF launch and aircraft activities create two types of noise: continuous (but short-duration) noise, due mostly to combustion effects of aircraft and launch vehicles; and impulsive noise, due to sonic boom effects. Launch operations are the major source of noise on the marine environment from VAFB. The operation of launch vehicle engines produces significant sound levels. Generally, noise is generated from four sources during launches: (1) combustion noise from launch vehicle chambers; (2) jet noise generated by the interaction of the exhaust jet and the atmosphere; (3) combustion noise from the post-burning of combustion products; and (4) sonic booms. Launch noise levels are highly dependent on the type of first-stage booster and the fuel used to propel the vehicle. Therefore, there is a great similarity in launch noise production within each class size of launch vehicles. The noise generated by VAFB activities will result in the incidental harassment of pinnipeds, both behaviorally and in terms of physiological (auditory) impacts.

Acoustic and visual stimuli generated by the use of heavy equipment during the Delta Mariner off-loading operations and harbor dredging and the increased presence of personnel may have the potential to cause Level B harassment of any pinnipeds hauled out in the VAFB harbor. This disturbance from acoustic and visual stimuli is the principal means of marine mammal taking associated with these activities.

The noise and visual disturbances from SLV and missile launches, aircraft and helicopter operations, and harbor maintenance activities may cause the animals to lift their heads, move towards the water, or enter the water. The proposed rule (78 FR 73794, December 9, 2013) contained information regarding marine mammal responses to launch noise and harbor

maintenance activities that has been gathered under previous LOAs and IHAs for these activities, as well as a scientific research permit issued to VAFB by NMFS for a research program (Permit No. 859-1680-01, expired January 1, 2009, and Permit No. 14197, expires June 30, 2014) to determine the short and long-term effects of SLV noise and sonic booms on affected marine mammals. That information is not repeated here.

In general, if the received level of the noise stimulus exceeds both the background (ambient) noise level and the auditory threshold of the animals, and especially if the stimulus is novel to them, there may be a behavioral response. The probability and degree of response will also depend on the season, the group composition of the pinnipeds, and the type of activity in which they are engaged. Minor and brief responses, such as short-duration startle or alert reactions, are not likely to constitute disruption of behavioral patterns, such as migration, nursing, breeding, feeding, or sheltering (i.e., Level B harassment) and would not cause injury or mortality to marine mammals. On the other hand, startle and alert reactions accompanied by large-scale movements, such as stampedes into the water of hundreds of animals, may rise to Level A harassment because animals could be injured. In addition, such large-scale movements by dense aggregations of marine mammals or at pupping sites could potentially lead to takes by injury or death. However, there is very little potential for large-scale movements leading to serious injury or mortality near the south VAFB harbor because, historically, the number of harbor seals hauled out near the site is less than 30 individuals, and there is no pupping at nearby sites. The effects of the harbor activities are expected to be limited to short-term startle responses and localized behavioral changes. Additionally, the USAF does not anticipate a significant impact on any of the species or stocks of marine mammals from launches from VAFB. For even the largest launch vehicles, such as Delta IV, the launch noises and sonic

booms can be expected to cause a startle response and flight to water for those harbor seals, California sea lions and other pinnipeds that are hauled out on the coastline of VAFB and on the NCI. The noise may cause temporary threshold shift in hearing depending on exposure levels, but no permanent threshold shift is anticipated. Because aircraft will fly at altitudes greater than 305 m (1,000 ft) around pinniped haul-outs and rookeries, animals are not anticipated to react to aircraft and helicopter overflights.

The potential effects to marine mammals described in this section of the document do not take into consideration the required monitoring and mitigation measures described later in this document (see the “Mitigation” and “Monitoring and Reporting” sections) which, as noted, should effect the least practicable adverse impact on affected marine mammal species and stocks.

Anticipated Effects on Marine Mammal Habitat

Impacts on marine mammal habitat are part of the consideration in making a finding of negligible impact on the species and stocks of marine mammals. Habitat includes rookeries, mating grounds, feeding areas, and areas of similar significance. We do not anticipate that the operations would result in any temporary or permanent effects on the habitats used by the marine mammals in the area, including the food sources they use (i.e. fish and invertebrates). While it is anticipated that the specified activity may result in marine mammals avoiding certain areas due to temporary ensonification, this impact to habitat is temporary and reversible and was considered in further detail, as behavioral modification. The main impact associated with the activity will be temporarily elevated noise levels and the associated direct effects on marine mammals.

Mitigation

In order to issue an incidental take authorization (ITA) under section 101(a)(5)(A) of the

MMPA, NMFS must, where applicable, set forth the permissible methods of taking pursuant to such activity, and other means of effecting the least practicable adverse impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for taking for subsistence uses (where relevant). The NDAA of 2004 amended the MMPA as it relates to military-readiness activities and the ITA process such that “least practicable adverse impact” shall include consideration of personnel safety, practicality of implementation, and impact on the effectiveness of the “military readiness activity.” The training activities described in the USAF application are considered military readiness activities.

Section 11 of the USAF application and Section 11 of Appendix A in the application contain descriptions of the mitigation measures to be implemented during the specified activities in order to effect the least practicable adverse impact on the affected marine mammal species and stocks and their habitats. Please refer to the application (see ADDRESSES) for the full description.

Measures during Launches and Aircraft and Helicopter Operations

All aircraft and helicopter flight paths must maintain a minimum distance of 1,000 ft (305 m) from recognized seal haul-outs and rookeries (e.g., Point Sal, Purisima Point, Rocky Point), except in emergencies or for real-time security incidents (e.g., search-and-rescue, fire-fighting) which may require approaching pinniped haul-outs and rookeries closer than 1,000 ft (305 m). For missile and rocket launches, unless constrained by other factors including human safety, national security concerns or launch trajectories, holders of LOAs must schedule launches to avoid, whenever possible, launches during the harbor seal pupping season of March through June. The USAF must avoid, whenever possible, launches which are predicted to produce a sonic

boom on the NCI during harbor seal, elephant seal, California sea lion, and northern fur seal pupping seasons.

If post-launch surveys determine that an injurious or lethal take of a marine mammal has occurred, the launch procedure and the monitoring methods must be reviewed, in cooperation with NMFS, and appropriate changes must be made through modification to an LOA, prior to conducting the next launch of the same vehicle under that LOA.

Measures during Harbor Activities

To reduce the potential for disturbance from visual and acoustic stimuli associated with the activities, the USAF contractor, United Launch Alliance/and or its designees, will implement the following mitigating measures for marine mammals:

- (1) If activities occur during nighttime hours, turn on lighting equipment before dusk. The lights would remain on for the entire night to avoid startling pinnipeds.
- (2) Initiate operations before dusk.
- (3) Keep construction noises at a constant level (i.e., not interrupted by periods of quiet in excess of 30 minutes) while pinnipeds are present.
- (4) If activities cease for longer than 30 minutes and pinnipeds are in the area, initiate a gradual start-up of activities to ensure a gradual increase in noise levels.
- (5) A qualified observer would visually monitor the harbor seals on the beach adjacent to the harbor and on rocks for any flushing or other behaviors as a result of the activities (see Monitoring).
- (6) The Delta Mariner and accompanying vessels would enter the harbor only when the tide is too high for harbor seals to haul-out on the rocks; reducing speed to 1.5 to 2 knots (1.5-2 nm/hr; 2.8-3.7 km/hr) once the vessel is within 3 mi (4.83 km) of the harbor. The vessel

would enter the harbor stern first, approaching the wharf and moorings at less than 0.75 knot (1.4 km/hr).

- (7) Explore alternate dredge methods and introduce quieter techniques and equipment as they become available.

Mitigation Conclusions

NMFS has carefully evaluated the applicant's mitigation measures and considered a range of other measures in the context of ensuring that NMFS prescribes the means of effecting the least practicable adverse impact on the affected marine mammal species and stocks and their habitat. Our evaluation of potential measures included consideration of the following factors in relation to one another:

- The manner in which, and the degree to which, the successful implementation of the measure is expected to minimize adverse impacts to marine mammals;
- The proven or likely efficacy of the specific measure to minimize adverse impacts as planned; and
- The practicability of the measure for applicant implementation, including consideration of personnel safety, practicality of implementation, and impact on the effectiveness of the military readiness activity.

Based on our evaluation of the applicant's measures, as well as other measures considered, NMFS has determined that the mitigation measures described above provide the means of effecting the least practicable adverse impact on marine mammals species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance while also considering personnel safety, practicality of implementation, and impact

on the effectiveness of the military readiness activity.

Monitoring and Reporting

In order to issue an ITA for an activity, section 101(a)(5)(A) of the MMPA states that we must set forth “requirements pertaining to the monitoring and reporting of such taking.” The Act’s implementing regulations at 50 CFR 216.104 (a)(13) indicate that requests for an authorization must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and our expectations of the level of taking or impacts on populations of marine mammals present in the action area.

As part of its application, the USAF provided a monitoring plan, similar to that in the current regulations (50 CFR 216.125) and previous IHAs issued to United Launch Alliance, for assessing impacts to marine mammals from rocket and missile launches at VAFB and Delta Mariner operations. This monitoring plan is described, in detail, in Section 8 of the main portion of the application for launch monitoring activities and Section 13 of Appendix A of the application for Delta Mariner operations monitoring activities. The following monitoring will be conducted under these regulations.

The monitoring will be conducted by a NMFS-approved marine mammal biologist experienced in surveying large numbers of marine mammals.

Monitoring for Launches on VAFB

Monitoring at the haul-out site closest to the launch facility will commence at least 72 hours prior to the launch and continue until at least 48 hours after the launch. Biological monitoring at VAFB will be conducted for all launches during the harbor seal pupping season, 1 March to 30 June. Acoustic and biological monitoring will be conducted on new space and missile launch vehicles during at least the first launch, whether it occurs within the pupping

season or not.

Monitoring will include multiple surveys each day that record, when possible, the species, number of animals, general behavior, presence of pups, age class, gender, and reaction to launch noise, sonic booms, or other natural or human-caused disturbances. Environmental conditions such as tide, wind speed, air temperature, and swell will also be recorded. Time-lapse photography or video will be used during daylight launches to document the behavior of mother-pup pairs during launch activities. For launches during the harbor seal pupping season (March through June), follow-up surveys will be made within 2 weeks of the launch to ensure that there were no adverse effects on any marine mammals. A report detailing the species, number of animals observed, behavior, reaction to the launch noise, time to return to the haul-out site, any adverse behavior and environmental conditions will be submitted to NMFS within 90 days of the launch.

Monitoring for the NCI

Monitoring will be conducted on the NCI (San Miguel, Santa Cruz, and Santa Rosa Islands) whenever a sonic boom over 1 pound per square foot (psf) is predicted (using the most current sonic boom modeling programs) to impact one of the islands between March 1 and June 30, over 1.5 psf between July 1 and September 30, and over 2 psf between October 1 and February 28. Monitoring will be conducted at the haul-out site closest to the predicted sonic boom impact area. Monitoring will be conducted by a NMFS-approved marine mammal biologist experienced in surveying large numbers of marine mammals. Monitoring will commence at least 72 hours prior to the launch and continue until at least 48 hours after the launch (if a sonic boom was detected during the actual launch).

Sonic boom prediction modeling is not conducted prior to missile launches because of

their trajectories, which do not have the potential to overfly and/or impact the NCI with sonic booms. Launches from the following sites would not overfly the NCI: Space Launch Complexes 2, 3, 6, and 8; Launch Facility 576-E, Test pad 01; and missile launch facilities 4, 9, 10, 23, and 24.

Monitoring will include multiple surveys each day that record the species, number of animals, general behavior, presence of pups, age class, gender, and reaction to launch noise, sonic booms, or other natural or human-caused disturbances. Environmental conditions such as tide, wind speed, air temperature, and swell will also be recorded. Due to the large numbers of pinnipeds found on some beaches of San Miguel Island, smaller focal groups should be monitored in detail rather than the entire beach population. A general estimate of the entire beach population should be made once a day and their reaction to the launch noise noted. Photography or video will be used during daylight launches to document the behavior of mother-pup pairs or dependent pups during launch activities. During the pupping season of any species affected by a launch, follow-up surveys will be made within 2 weeks of the launch to ensure that there were no adverse effects on any marine mammals. A report detailing the species, number of animals observed, behavior, reaction to the launch noise, time to return to the haul-out site, any adverse behavior and environmental conditions will be submitted to NMFS within 90 days of the launch.

Harbor Activities

United Launch Alliance will designate a qualified and biologically trained observer to monitor the area for pinnipeds during all harbor activities. During nighttime activities, United Launch Alliance will illuminate the harbor area and the observer will use a night vision scope. Monitoring activities will consist of the following:

- (1) Conducting baseline observation of pinnipeds in the project area prior to initiating

project activities.

(2) Conducting and recording observations on pinnipeds in the vicinity of the harbor for the duration of the activity occurring when tides are low enough (less than or equal to 2 ft (0.61 m) for pinnipeds to haul out.

(3) Conducting post-construction observations of pinniped haul-outs in the project area to determine whether animals disturbed by the project activities return to the haul-out.

Reporting Measures

A report containing the following information must be submitted to NMFS within 90 days after each launch: (1) Date(s) and time(s) of each launch; (2) date(s), location(s), and preliminary findings of any research activities related to monitoring the effects on launch noise and sonic booms on marine mammal populations; and (3) results of the monitoring programs, including but not necessarily limited to (a) numbers of pinnipeds present on the haul-out prior to commencement of the launch, (b) numbers of pinnipeds that may have been harassed as noted by the number of pinnipeds estimated to have entered the water as a result of launch noise, (c) the length of time(s) pinnipeds remained off the haul-out or rookery, (d) the numbers of pinniped adults or pups that may have been injured or killed as a result of the launch, and (4) any behavioral modifications by pinnipeds that likely were the result of launch noise or the sonic boom.

If a freshly dead or seriously injured pinniped is found during post-launch monitoring, the incident must be reported within 48 hours to the NMFS Office of Protected Resources and the NMFS West Coast Regional Office.

An annual report must be submitted to NMFS on March 1 of each year. The first report will cover the time period from issuance of the LOA through February 28, 2015. Each annual

report after that time will cover the time period from March 1 through February 28. Information in the annual reports will describe any incidental takings under an LOA not reported in the 90-day launch reports, such as the aircraft test program and helicopter operations and any assessments made of their impacts on hauled-out pinnipeds, summarize the information from the 90-day launch reports, and describe the information collected during monitoring of Delta Mariner operations. Information related to Delta Mariner operations that must be included in the annual report include: (1) date, time, and duration of activity; (2) weather; (3) tide status; (4) composition (species, gender, and age class) and locations of haul-out group(s); (5) horizontal visibility; and (6) and results of the monitoring program, which include (i) number and species of pinnipeds present on haul-out(s) prior to start of activity and behavioral patterns, (ii) number and species of pinnipeds that may have been harassed as noted by the number of pinnipeds estimated to have entered the water as a result of noise related to the activity, (iii) brief description of any activity/action that causes animal(s) to flush, (iv) length of time pinnipeds remained off the haul-out or rookery, and (v) noted behavioral modifications by pinnipeds that were likely the result of the activity in the harbor.

A final report must be submitted to NMFS no later than 180 days prior to expiration of these regulations. This report must summarize the findings made in all previous reports and assess both the impacts at each of the major rookeries and the cumulative impact on pinnipeds and any other marine mammals from the specified activities.

Adaptive Management

NMFS has included an adaptive management component in the regulations governing the take of marine mammals incidental to the USAF activities at VAFB. In accordance with 50 CFR 216.105(c), regulations must be based on the best available information. As new information is

developed, through monitoring, reporting, or research, the regulations may be modified, in whole or in part, after notice and opportunity for public review. The use of adaptive management will allow NMFS to consider new information from different sources to determine if mitigation or monitoring measures should be modified (including additions or deletions) if new data suggest that such modifications are appropriate for subsequent LOAs. The following are some of the possible sources of applicable data:

- Results from the USAF's monitoring from the previous year;
- Results from general marine mammal and/or sound research or studies; or
- Any information which reveals that marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs.

In addition, LOAs shall be withdrawn or suspended if, after notice and opportunity for public comment, the Assistant Administrator finds, among other things, the regulations are not being substantially complied with or the taking allowed is having more than a negligible impact on the species or stock, as allowed for in 50 CFR 216.106(e). That is, should monitoring and reporting indicate that the operations and activities from VAFB launch complexes or at VAFB harbor are having more than a negligible impact on marine mammals, then NMFS reserves the right to modify the regulations and/or withdraw or suspend an LOA after public review.

Comments and Responses

On December 9, 2013 (78 FR 73794), we published a proposed rule in response to the USAF's request to take marine mammals incidental to launch, aircraft, and helicopter operations from VAFB launch complexes and Delta Mariner operations, cargo unloading activities, and harbor maintenance dredging in support of the Delta IV/EELV launch activity on south VAFB for a period of 5 years, requesting comments, information, and suggestions concerning the

request. During the 30-day public comment period, we received a letter from the Marine Mammal Commission. The letter stated that the Marine Mammal Commission concurs with NMFS' preliminary finding and therefore recommends that NMFS issue the final rule, subject to inclusion of the proposed mitigation, monitoring, and reporting measures. We have included all of the mitigation, monitoring, and reporting measures contained in the proposed rule in this final rule. We did not receive any other letters or comments from the public on the proposed rule.

Numbers of Marine Mammals Estimated to be Taken by Harassment

The marine mammal species NMFS believes likely to be taken by Level B harassment incidental to launch and aircraft and helicopter operations at VAFB are harbor seals, California sea lions, northern elephant seals, northern fur seals, and Steller sea lions. NMFS believes that all of these species except for northern fur seals are likely to be taken by Level B harassment incidental to Delta Mariner operations at the VAFB harbor. All of these species are protected under the MMPA, and none are listed under the Endangered Species Act (ESA). On November 4, 2013, NMFS published a final rule delisting the eastern distinct population segment (DPS) of Steller sea lions (78 FR 66139). We have determined that this DPS has recovered and no longer meets the definition of an endangered or threatened species under the ESA. The Steller sea lions at VAFB are part of the eastern DPS. Numbers of animals that may be taken by Level B harassment are expected to vary due to factors such as type of SLV, location of the sonic boom, weather conditions (which can influence the size of the sonic boom), the time of day, and the time of year, as well as launch trajectory and the number of launches in a given year. For this reason, ranges are given for the harassment estimates of marine mammals. Aircraft operations will occur frequently but will avoid pinniped haul-out areas and are unlikely to disturb pinnipeds.

As noted earlier, sightings of Guadalupe fur seals have been extremely rare the last few

decades at VAFB and on the NCI. Therefore, no takes by harassment are anticipated for this species incidental to the proposed activities.

Take estimates at VAFB and the NCI from launches are based on decades of visual observations and systematic marine mammal surveys conducted at the launch sites and known pinniped haul-outs on VAFB and the NCI. Surveys are conducted by VAFB marine mammal monitors, as well as National Park Service employees. Take estimates at the VAFB harbor are based on visual observations conducted there since 2001 by marine mammal monitors noting observations during Delta Mariner operations.

Estimated Takes at VAFB

The following text describes the potential range of takes possible of pinnipeds on VAFB during launches. Table 4 provides this information in outline form.

Harbor seals: As many as 400 harbor seals per launch may be taken. Depending on the type of rocket being launched, the time of day, time of the year, weather conditions, tide and swell conditions, the number of seals that may be taken will range between 0 and 400. Launches and aircraft operations may occur at any time of the year, so any age classes and gender may be taken.

California sea lions: As many as 300 sea lions per launch may be taken. Sea lions at VAFB are usually juveniles of both sexes and sub-adult males that haul out in the fall during the post breeding dispersal. Births generally do not occur at VAFB, but five pups were observed at VAFB in 2003, an El Nino year, although all were abandoned by their mothers and died within several days of birth. Sick or emaciated weaned pups may also haul out briefly.

Northern elephant seals: As many as 100 elephant seals per launch may be taken. Weaned elephant seal pups, juveniles, or young adults of both sexes, may occasionally haul out

at VAFB for several days to rest or as long as 30 days to molt. Injured or sick seals may also haul out briefly.

Steller sea lions: Steller sea lions have only been noted at VAFB in April and May of 2012 and again from February-April 2013. Numbers were small. As many as 36 Steller sea lions may be taken per launch.

Northern fur seals: There are no reports of northern fur seals at VAFB. Therefore, it is unlikely that any fur seals will be taken.

Table 4. Predicted Level B harassment takes of pinnipeds on VAFB on a per launch basis.

Species	Age groups	Sex	Reproductive condition	Takes per launch from noise or visual disturbance	Takes from aircraft operations
Pacific harbor seal	All	Both	Pupping and breeding March through June	0-400	None
California sea lion	All	Both	Pupping and breeding June through July, but no pupping expected at VAFB	0-300	None
Northern elephant seal	All	Both	No pregnant or breeding animals expected; mostly "weaners"	0-100	None
Steller sea lion	All	Both	No pupping or breeding at VAFB	0-36	None
Northern fur seal	Mostly juveniles	Both	Only stranded animals	None	None

Estimated Takes on the NCI

Sonic booms created by SLVs may impact marine mammals on the NCI, particularly San Miguel Island. Missile launches utilize westward trajectories so do not cause sonic boom impacts to the NCI. Sonic boom modeling software will continue to be used to predict the area of sonic boom impact and magnitude of the sonic boom on the NCI based on the launch vehicle, speed, trajectory, and meteorological conditions. Prior to each SLV launch, a predictive sonic boom map of the impact area and magnitude of the sonic boom will be generated. Based on previous monitoring of sonic booms created by SLVs on San Miguel (Thorson et al., 1999a: 1999b), it is estimated that as much as approximately 25 percent of the marine mammals may be disturbed on

SMI (Thorson et al., 1999a; 1999b). Most sonic booms that reach San Miguel Island are small (<1 psf), although larger sonic booms are possible but rarely occur. A conservative take estimate of as much as 25 percent of the animals present is used for each species per launch. Table 5 presents the potential numbers of takes per launch event on the NCI.

Table 5. Predicted Level B harassment takes on the NCI on a per launch basis.

Species	Age groups	Sex	Reproductive condition	Takes per launch from sonic booms
Pacific harbor seal	All	Both	Pupping and breeding March through June	0-200
California sea lion	All	Both	Pupping and breeding June through July	0-6,000 pups 0-3,000 juveniles and adults
Northern elephant seal	All	Both	Pupping December through March	0-500 pups 1,000 juveniles and adults
Steller sea lion	Adult	Both	No pupping or breeding at NCI	None; virtually no presence on San Miguel
Northern fur seal	Mostly juveniles	Both	Pupping and breeding in June and July	0-250 pups 0-1,000 juveniles and adults

Estimated Takes from Delta Mariner Operations

Estimates of the numbers of marine mammals that might be affected are based on consideration of the number of animals that could be disturbed appreciably by approximately 43 days for Pacific harbor seals and California sea lions, 8 days for northern elephant seals, and 3 days for Steller sea lions. The lower number of days for northern elephant seals and Steller sea lions are based on the fact that those species haul-out in fewer numbers and fewer times throughout the year at the VAFB harbor than harbor seals or California sea lions.

Based on previous monitoring reports, with the same activities conducted in the proposed operations area, we estimate that approximately 1,161 Pacific harbor seals, 129 California sea lions, 24 northern elephant seals, and 24 Steller sea lions could be potentially affected by Level B behavioral harassment over the course of each year of activities. We base these estimates on historical pinniped survey counts from 2001 to 2011, and calculated takes by multiplying the

average of the maximum abundance by the number of days noted above (i.e., the total number of operational days). Thus, the USAF requests authorization to incidentally harass approximately 1,161 Pacific harbor seals (27 animals by 43 days), 129 California sea lions (3 animals by 43 days), 24 northern elephant seals (3 animals by 8 days), and 24 Steller sea lions (8 animals by 3 days).

Table 6 presents the maximum number of potential takes on an annual basis. However, actual takes could be lower than this number. The range of animals that could be taken is based on zero animals responding up to the maximum for each launch event plus Delta Mariner operations. Although not anticipated between 2014 and early 2019, up to 50 launches per year are authorized for taking of marine mammals. However, as noted in Table 2 earlier in this document, no more than 12-19 launches are actually anticipated to occur on an annual basis between 2014 and 2019. Additionally, not all launches will overfly the NCI. However, the numbers presented in Table 6 represent the maximum end of the range and assume that all 50 launches would overfly the NCI. Therefore, actual takes will likely be much lower than the maximum estimate.

Table 6. Total number of annual Level B takes from a total of 50 launches and Delta Mariner operations. Numbers are likely overestimated as not all launches would overfly the NCI.

Species	Total number of authorized Level B takes annually
Pacific harbor seal	31,161
California sea lion	465,129
Northern elephant seal	80,024
Steller sea lion	1,824
Northern fur seal	62,500

With the incorporation of mitigation measures described earlier in this document, the

USAF and NMFS expect that only Level B incidental harassment may occur as a result of the activities and that these events will result in no detectable impact on marine mammal species or stocks or on their habitats.

Negligible Impact Analysis and Determination

We have defined “negligible impact” in 50 CFR 216.103 as “...an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.”

In making a negligible impact determination, we consider:

- (1) The number of anticipated injuries, serious injuries, or mortalities;
- (2) The number, nature, and intensity, and duration of Level B harassment (all relatively limited);
- (3) The context in which the takes occur (i.e., impacts to areas of significance, impacts to local populations, and cumulative impacts when taking into account successive/contemporaneous actions when added to baseline data);
- (4) The status of stock or species of marine mammals (i.e., depleted, not depleted, decreasing, increasing, stable, impact relative to the size of the population);
- (5) Impacts on habitat affecting rates of recruitment/survival; and
- (6) The effectiveness of monitoring and mitigation measures.

As mentioned previously, we estimate that five species of marine mammals could be potentially affected by Level B harassment from launch activities and that four of those five species could be potentially affected by Level B harassment from Delta Mariner operations.

For reasons stated previously in this document, the specified activities are not likely to cause long-term behavioral disturbance, abandonment of the haul-out area, serious injury, or mortality because:

(1) The effects of the activities are expected to be limited to short-term startle responses and localized behavioral changes. Minor and brief responses, such as short-duration startle or alert reactions, are not likely to constitute disruption of behavioral patterns, such as migration, nursing, breeding, feeding, or sheltering.

(2) Launches will likely not occur more than about 12-19 times per year over the next 5 years.

(3) Delta Mariner off-loading operations and associated cargo movements within the harbor would occur at a maximum frequency of four times per year, and the vessel's arrival and departure would occur during daylight hours at high tide when the haul out areas are fully submerged and few, if any, pinnipeds are present in the harbor;

(4) The relatively slow operational speed of the Delta Mariner (1.5 to 2 kts; 1.72 mph) during its approach to the harbor at high tide and the vessel's slow operational speed (0.75 kts; 0.86 mph) during its approach to the wharf;

(5) There is no potential for large-scale movements leading to serious injury or mortality;

(6) Many of the specified activities do not occur near rookeries;

(7) The availability of alternate areas near the harbor for pinnipeds to avoid the resultant noise from the maintenance and vessel operations; and

(8) Results from previous monitoring reports that support our conclusions that the pinnipeds returned to the haul-out sites during periods of low tide after the disturbance and do

not permanently abandon a haul-out site during the conduct of harbor maintenance and Delta Mariner operations or launches from VAFB.

As confirmed by past monitoring reports, we do not anticipate that any injuries, serious injuries, or mortalities would occur as a result of the activities, and did not authorize injury, serious injury or mortality. These species may exhibit behavioral modifications, including temporarily vacating the area during the activities to avoid the resultant acoustic and visual disturbances. Due to the nature, degree, and context of the behavioral harassment anticipated, the activities are not expected to impact rates of recruitment or survival. Further, these activities would not adversely impact marine mammal habitat.

We have determined, provided that the USAF carries out the previously described mitigation and monitoring measures, that the impact of conducting the activities may result, at worst, in a temporary modification in behavior and/or low-level physiological effects (Level B harassment) of certain species of marine mammals.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the mitigation and monitoring measures, we have determined that the total taking from the activities will have a negligible impact on the affected species or stocks; and that impacts to affected species or stocks of marine mammals would be mitigated to the lowest level practicable.

Impact on Availability of Affected Species or Stock for Taking for Subsistence Uses

Section 101(a)(5)(A) of the MMPA also requires us to determine that the authorization will not have an unmitigable adverse effect on the availability of marine mammal species or stocks for subsistence use. There are no relevant subsistence uses of marine mammals in the study area (northeastern Pacific Ocean) that implicate section 101(a)(5)(A) of the MMPA.

Endangered Species Act

There are no species listed as threatened or endangered in the activity area. Therefore, consultation under section 7 of the ESA is not required.

National Environmental Policy Act (NEPA)

The USAF prepared a Final EA and issued a Finding of No Significant Impact (FONSI) in 1997 as part of its application for an incidental take authorization. On March 1, 1999 (64 FR 9925), NMFS adopted this EA as provided for by the Council on Environmental Quality regulations. In 2003, NMFS prepared its own EA and issued a FONSI for the final rule issued in February, 2004. In January 2009, NMFS prepared a new EA and issued a FONSI for the final rule issued in February 2009.

In 2001, the USAF prepared an EA for Harbor Activities Associated with the Delta IV Program at Vandenberg Air Force Base. In 2005, we prepared an EA augmenting the information contained in the USAF's EA and issued a FONSI on the issuance of an Incidental Harassment Authorization for United Launch Alliance's harbor activities in accordance with section 6.01 of the NOAA Administrative Order 216-6 (Environmental Review Procedures for Implementing the National Environmental Policy Act, May 20, 1999).

NMFS conducted a new analysis, pursuant to NEPA, to determine whether the issuance of MMPA rulemaking and subsequent LOA(s) may have a significant effect on the human environment. In February 2014, NMFS released an EA and issued a FONSI for this action. NMFS determined that issuance of these regulations and subsequent LOA would not significantly impact the quality of the human environment; therefore, preparation of an Environmental Impact Statement was not required for this action.

National Marine Sanctuaries Act

We previously discussed the promulgation of MMPA regulations and issuing associated LOAs with the NOAA National Ocean Service's Office of National Marine Sanctuaries to determine whether or not NMFS' action is likely to destroy, cause the loss of, or injure any national marine sanctuary resources. On December 12, 2008, the Office of National Marine Sanctuaries determined that no further consultation with NMFS was required on its proposed action as this action is not likely to destroy, cause the loss of, or injure any national marine sanctuary resources. The activities in this rulemaking are identical to those discussed in 2008.

Classification

Pursuant to the procedures established to implement section 6 of Executive Order 12866, the Office of Management and Budget has determined that this final rule is not significant.

At the proposed rule stage, the Chief Counsel for Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration that this rule, if adopted, would not have a significant economic impact on a substantial number of small entities. The 30th Space Wing, USAF, and their contractors are the entities that will be affected by this rulemaking, none of which are considered a small governmental jurisdiction, small organization, or small business, as defined by the Regulatory Flexibility Act. United Launch Alliance, the contractor hired by the USAF to conduct the harbor activities and Delta Mariner operations, is a joint venture between Boeing and Lockheed Martin. The Small Business Administration defines a small entity as one that is independently owned and operated and not dominant in its field of operation. United Launch Alliance employs approximately 3,900 employees working at sites across the country, has annual revenues exceeding \$1 billion, and is dominant in the field of aerospace vehicle launching. United Launch Alliance therefore does not meet the definition of a small entity. No comments were received on the certification.

Accordingly, a regulatory flexibility analysis is not required and none has been prepared.

List of Subjects in 50 CFR Part 217

Exports, Fish, Imports, Indians, Labeling, Marine mammals, Penalties, Reporting and recordkeeping requirements, Seafood, Transportation.

Dated: February 19, 2014.

Samuel D. Rauch III,
Deputy Assistant Administrator for Regulatory Programs,
National Marine Fisheries Service.

For reasons set forth in the preamble, 50 CFR part 217 is amended as follows:

PART 217--REGULATIONS GOVERNING THE TAKE OF MARINE MAMMALS
INCIDENTAL TO SPECIFIED ACTIVITIES

1. The authority citation for part 217 continues to read as follows:

Authority: 16 U.S.C. 1361 et seq.

2. Subpart G is added to part 217 to read as follows:

Subpart G--Taking Of Marine Mammals Incidental to U.S. Air Force Launches, Aircraft and Helicopter Operations, and Harbor Activities Related to Launch Vehicles from Vandenberg Air Force Base (VAFB), California

Sec.

217.60 Specified activity and specified geographical region.

217.61 Effective dates.

217.62 Permissible methods of taking.

217.63 Prohibitions.

217.64 Mitigation.

217.65 Requirements for monitoring and reporting.

217.66 Letters of Authorization.

217.67 Renewals and modifications of Letters of Authorization.

Subpart G--Taking Of Marine Mammals Incidental to U.S. Air Force Launches, Aircraft and Helicopter Operations, and Harbor Activities Related to Launch Vehicles from Vandenberg Air Force Base (VAFB), California

§ 217.60 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to the the 30th Space Wing, United States Air Force (USAF), at Vandenberg Air Force Base and those persons it authorizes to conduct activities on its behalf for the taking of marine mammals that occurs in the area outlined in paragraph (b) of this section and that occurs incidental to:

(1) Launching up to 15 space and missiles vehicles each year from Vandenberg Air Force Base, for a total of up to 75 missiles over the 5-year period of these regulations,

(2) Launching up to 35 rockets each year from Vandenberg Air Force Base, for a total of up to 175 rocket launches over the 5-year period of these regulations,

(3) Aircraft flight test operations,

(4) Helicopter operations from Vandenberg Air Force Base, and

(5) Delta Mariner (or a similar vessel) operations, cargo unloading activities, and harbor maintenance dredging.

(b) The taking of marine mammals by the USAF may be authorized in a Letter of Authorization only if it occurs from the space launch complexes, launch facilities, and test pads on north and south Vandenberg Air Force Base and the Vandenberg Air Force Base harbor on

South Base.

§ 217.61 Effective dates.

Regulations in this subpart are effective from March 26, 2014 through March 26, 2019.

§ 217.62 Permissible methods of taking.

(a) Under Letters of Authorization issued pursuant to §§ 216.106 and 217.60 of this chapter, the Holder of the Letter of Authorization (herein after the USAF) may incidentally, but not intentionally, take marine mammals by harassment, within the area described in § 217.60(b), provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate Letter of Authorization.

(b) The activities identified in § 217.60(a) must be conducted in a manner that minimizes, to the greatest extent practicable, any adverse impacts on marine mammals and their habitat.

(c) The incidental take of marine mammals under the activities identified in § 217.60(a) of this chapter is limited to the indicated number of Level B harassment takes on an annual basis of the following species:

- (1) Harbor seals (Phoca vitulina) – 31,161;
- (2) California sea lions (Zalophus californianus) – 465,129;
- (3) Northern elephant seals (Mirounga angustirostris) – 80,024;
- (4) Northern fur seals (Callorhinus ursinus) – 62,500; and
- (5) Steller sea lions (Eumetopias jubatus) – 1,824.

§ 217.63 Prohibitions.

Notwithstanding takings contemplated in § 217.62(c) and authorized by a Letter of Authorization issued under §§ 216.106 and 217.66 of this chapter, no person in connection with the activities described in § 217.60 may:

- (a) Take any marine mammal not specified in § 217.62(c);
- (b) Take any marine mammal specified in § 217.62(c) other than by incidental, unintentional Level B harassment;
- (c) Take a marine mammal specified in § 217.62(c) if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or
- (d) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or a Letter of Authorization issued under §§ 216.106 and 217.66 of this chapter.

§ 217.64 Mitigation.

(a) When conducting the activities identified in § 217.60(a), the mitigation measures contained in the Letter of Authorization issued under §§ 216.106 and 217.66 of this chapter must be implemented. These mitigation measures include (but are not limited to):

(1) All aircraft and helicopter flight paths must maintain a minimum distance of 1,000 ft (305 m) from recognized seal haul-outs and rookeries (e.g., Point Sal, Purisima Point, Rocky Point), except in emergencies or for real-time security incidents (e.g., search-and-rescue, fire-fighting), which may require approaching pinniped haul-outs and rookeries closer than 1,000 ft (305 m).

(2) For missile and rocket launches, holders of Letters of Authorization must avoid, whenever possible, launches during the harbor seal pupping season of March through June, unless constrained by factors including, but not limited to, human safety, national security, or for space vehicle launch trajectory necessary to meet mission objectives.

(3) Vandenberg Air Force Base must avoid, whenever possible, launches which are predicted to produce a sonic boom on the Northern Channel Islands during harbor seal, elephant seal, California sea lion, and northern fur seal pupping seasons of March through June.

(4) If post-launch surveys determine that an injurious or lethal take of a marine mammal has occurred, the launch procedure and the monitoring methods must be reviewed, in cooperation with the National Marine Fisheries Service (NMFS), and appropriate changes must be made through modification to a Letter of Authorization, prior to conducting the next launch under that Letter of Authorization.

(5) Delta Mariner (or a similar vessel) operations, cargo unloading, and harbor maintenance dredging measures:

(i) If activities occur during nighttime hours, turn on lighting equipment before dusk. Lights must remain on for the entire night to avoid startling pinnipeds.

(ii) Initiate operations before dusk.

(iii) Keep construction noises at a constant level (i.e., not interrupted by periods of quiet in excess of 30 minutes) while pinnipeds are present.

(iv) Initiate a gradual start-up of activities to ensure a gradual increase in noise levels if activities cease for longer than 30 minutes and pinnipeds are in the area.

(v) Conduct visual monitor, by a qualified observer, of the harbor seals on the beach adjacent to the harbor and on rocks for any flushing or other behaviors as a result of activities described in § 217.60(a).

(vi) The Delta Mariner and accompanying vessels must enter the harbor only when the tide is too high for harbor seals to haul-out on the rocks; reducing speed to 1.5 to 2 knots (1.5-2 nm/hr; 2.8-3.7 km/hr) once the vessel is within 3 mi (4.83 km) of the harbor. The vessel must enter the harbor stern first, approaching the wharf and moorings at less than 0.75 knot (1.4 km/hr).

(vii) Explore alternate dredge methods and introduce quieter techniques and equipment as

they become available.

(6) Additional mitigation measures as contained in a Letter of Authorization.

(b) [Reserved]

§ 217.65 Requirements for monitoring and reporting.

(a) Unless specified otherwise in the Letter of Authorization, the USAF must notify the Administrator, West Coast Region, NMFS, by letter or telephone, at least 2 weeks prior to activities possibly involving the taking of marine mammals. If the authorized activity identified in § 217.60(a) is thought to have resulted in the mortality or injury of any marine mammals or in any take of marine mammals not identified in § 217.62(c), then the USAF must notify the Director, Office of Protected Resources, NMFS, or designee, by telephone (301-427-8401), within 48 hours of the discovery of the injured or dead animal.

(b) To conduct monitoring of launch activities, the USAF must designate qualified, on-site individuals approved in advance by NMFS, as specified in the Letter of Authorization, to:

(1) Conduct observations on pinniped activity in the vicinity of the rookery nearest the launch platform or, in the absence of pinnipeds at that location, at another nearby haul-out, for at least 72 hours prior to any planned launch occurring during the harbor seal pupping season (1 March through 30 June) and continue for a period of time not less than 48 hours subsequent to launching.

(2) For launches during the harbor seal pupping season (March through June), conduct follow-up surveys within 2 weeks of the launch to ensure that there were no adverse effects on any marine mammals,

(3) Monitor haul-out sites on the Northern Channel Islands, if it is determined by modeling that a sonic boom of greater than 1 psf is predicted to impact one of the Islands

between March 1 and June 30, greater than 1.5 psf between July 1 and September 30, and greater than 2 psf between October 1 and February 28. Monitoring will be conducted at the haul-out site closest to the predicted sonic boom impact area.

(4) Investigate the potential for spontaneous abortion, disruption of effective female-neonate bonding, and other reproductive dysfunction,

(5) Supplement observations on Vandenberg and on the Northern Channel Islands with video-recording of mother-pup seal responses for daylight launches during the pupping season,

(6) Conduct acoustic measurements of those launch vehicles that have not had sound pressure level measurements made previously, and

(7) Include multiple surveys each day that surveys are required that record the species, number of animals, general behavior, presence of pups, age class, gender and reaction to launch noise, sonic booms or other natural or human caused disturbances, in addition to recording environmental conditions such as tide, wind speed, air temperature, and swell.

(c) To conduct monitoring of harbor activities, the USAF must designate qualified, on-site individuals approved in advance by NMFS, as specified in the Letter of Authorization. During nighttime activities, the harbor area will be illuminated, and the observer will use a night vision scope. Monitoring activities will consist of the following:

(1) Conducting baseline observation of pinnipeds in the project area prior to initiating project activities.

(2) Conducting and recording observations on pinnipeds in the vicinity of the harbor for the duration of the activity occurring when tides are low enough (less than or equal to 2 ft (0.61 m) for pinnipeds to haul out.

(3) Conducting post-construction observations of pinniped haul-outs in the project area to

determine whether animals disturbed by the project activities return to the haul-out.

(d) Holders of Letters of Authorization must conduct additional monitoring as required under a Letter of Authorization.

(e) The USAF must submit a report to the West Coast Regional Administrator, NMFS, within 90 days after each launch. This report must contain the following information:

- (1) Date(s) and time(s) of the launch,
- (2) Design of the monitoring program, and
- (3) Results of the monitoring program, including, but not necessarily limited to:
 - (i) Numbers of pinnipeds present on the haul-out prior to commencement of the launch,
 - (ii) Numbers of pinnipeds that may have been harassed as noted by the number of pinnipeds estimated to have entered the water as a result of launch noise,
 - (iii) The length of time pinnipeds remained off the haul-out or rookery,
 - (iv) Numbers of pinniped adults, juveniles or pups that may have been injured or killed as a result of the launch, and
 - (v) Behavioral modifications by pinnipeds that were likely the result of launch noise or the sonic boom.
- (f) An annual report must be submitted on March 1 of each year.
- (g) A final report must be submitted at least 180 days prior to expiration of these regulations. This report will:
 - (1) Summarize the activities undertaken and the results reported in all previous reports,
 - (2) Assess the impacts at each of the major rookeries,
 - (3) Assess the cumulative impacts on pinnipeds and other marine mammals from the activities specified in § 217.60(a), and

(4) State the date(s), location(s), and findings of any research activities related to monitoring the effects on launch noise, sonic booms, and harbor activities on marine mammal populations.

§ 217.66 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, the USAF must apply for and obtain a Letter of Authorization.

(b) A Letter of Authorization, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If a Letter of Authorization expires prior to the expiration date of these regulations, the USAF must apply for and obtain a renewal of the Letter of Authorization.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by a Letter of Authorization, the USAF must apply for and obtain a modification of the Letter of Authorization as described in § 217.67.

(e) The Letter of Authorization will set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (i.e., mitigation) on the species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the Letter of Authorization shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of a Letter of Authorization shall be published in the Federal Register within 30 days of a determination.

§ 217.67 Renewals and modifications of Letters of Authorization.

(a) A Letter of Authorization issued under § 216.106 and § 217.66 of this chapter for the activity identified in § 217.60(a) shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations (excluding changes made pursuant to the adaptive management provision in § 217.67(c)(1) of this chapter), and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous Letter of Authorization under these regulations were implemented.

(b) For Letter of Authorization modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in § 217.67(c)(1)) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed Letter of Authorization in the Federal Register, including the associated analysis illustrating the change, and solicit public comment before issuing the Letter of Authorization.

(c) A Letter of Authorization issued under § 216.106 and § 217.66 of this chapter for the activity identified in § 217.60(a) may be modified by NMFS under the following circumstances:

(1) Adaptive Management – NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with the USAF regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these

regulations.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in a Letter of Authorization:

(A) Results from the USAF's monitoring from the previous year(s).

(B) Results from other marine mammal and/or sound research or studies.

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent Letters of Authorization.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of proposed Letter of Authorization in the Federal Register and solicit public comment.

(2) Emergencies - If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in § 217.62(c) of this chapter, a Letter of Authorization may be modified without prior notice or opportunity for public comment. Notice would be published in the Federal Register within 30 days of the action.

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